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Family Food Consumption : Desire towards Convenient Food Products

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Abstract

The purpose of this study is to identify the salient factors affecting convenient food consumption among working women. Using structural equation modeling, *halal* awareness, food nutritious value, health awareness, price consideration, budget allocation and time factor were modeled to impact convenient food consumption. It is found that time factor has significant positive impact on convenient food consumption. The rest of the factors namely health awareness, *halal* awareness, price consideration, budget allocation and family influence do not have any significant effect on convenient food consumption.

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Keyword: halal; convenient food; food consumption; healthy food

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1. Introduction

The rising number of urban population has increased the demand for products and services associated to fast-paced city living, particularly products which is convenient and time-saving. In addition, there is an emergence of retail food outlets that serve fast and convenient food to meet consumers demand. More importantly, convenient food products such as frozen food, canned and packaged food are made available in hypermarkets and supermarkets near to the consumers. Thus, it replaces the traditional ways of cooking food with those that is hassle-free, fast and convenient.

The fast growth of disposable income among consumers in urban area has enabled them to have more opportunities to consider a wider array of products and services compared to those in rural area. The expenditure patterns of the former reflect greater choice. Indeed, living in the cities has exposed more Malaysian consumers to popular retail trends and marketing campaigns. The rapid trend of living has changed consumer behavior especially in their eating habits. At present, many fast food restaurants and retail food outlets mushroom in urban area and big cities. Parents who are busy during weekdays tend to dine out or buy take away food for dinner. Thus, it reduces the time spent in a kitchen in preparing meals for family.

The purpose of this research is to identify the factors that may influence convenient food choices among women who work in a local university. There are factors that can possibly have an impact on convenient food consumption. Among others are *halal* awareness, working mothers, time factor, health consciousness, food nutritious value and price consideration.

2. Literature Review

A lot of research conducted on convenient food may constantly consider the element of time (Buckley et al, 2007). Convenience involves more than just quality time, especially in food preparation (Gofton and Marshall, 1998; Buckley et al., 2007), but it also concentrates on physical and mental effort associated with food-specific activities (Man & Fullerton, 1990; Buckley et al., 2007). It is important to consider convenience at all stages in the process of food consumption and to determine the proportionate importance that consumers attach to time and energy use in acquisition, consumption and disposal (Brown and McEnally, 1993). Therefore, convenience is defined in terms of time, physical energy and mental effort savings related to food preparation and consumption.

From the definition of convenience, there are types of convenient food products that can be considered. Douglas (1976) and de Boer et al. (2004) consider eating in canteens and restaurant as convenience. Capps et al. (1983) and de Boer et al. (2004) define convenient food as fully prepared or partially prepared food items where some or all of the preparation time, culinary skills or energy inputs are provided by the food processor-distributor rather than in the home-makers kitchen. According to Romani (2006), for post-modern family members, lunch is usually consumed outside of home (at school or workplace) or at home but in a personalized way. In addition, work meeting, sports practice or friend's party have become legitimate reasons to miss the evening meals. Many family members often eat lunch outside of home and families generally eat out more than in the modern era when going to a restaurant was considered a special outing. This observation has to be considered along with an increased use of ready-made convenience food that makes food preparation quicker and easier. Therefore,

H₁: Time factor has a positive relationship to convenient food consumption

People eat convenient food as they have other pressing obligation and it solves meal scheduling problems (Warde, 1999; Buckley et al., 2007) and perceived time pressure (McKenzie, 1986; Buckley et al., 2007). McKenzie (1986) reported that although working women contribute to financial enrichment of household, a situation of '*time poverty*' may develop. This leads to less time available for household chores and meal preparation (De Boer et al., 2004).

The demand for convenient food in the Great Britain has been fuelled by the increased female participation in the work-force (Senauer et al., 1991; Buckley et al., 2007). The high stress level experienced among working women has resulted in greater use of convenient food (Gupta & Jenkins, 1985; McKenzie 1986; Buckley et al, 2007). Since providing meals and securing family health are traditionally been the responsibility of women (Redman, 1980; Buckley et al, 2007), their employment has reduced the time available for household work (Jacobsen, 1999; Suen, 1994; Buckley et al., 2007). During weekdays, time would be one of the constraints in preparing food; hence convenient food would be the solution (Mintel, 2000).

According to the study by the International Labour Union, workers in the US and Japan are putting in more hours than anyone else in the industrialized world (Euromonitor International, 2007). Devine et al determine how work conditions relate to parents' food choice coping strategies. Half or more of respondents often or sometimes used 12 of 22 food choice coping strategies. Long hours and non-standard hours and schedules were positively associated among fathers with take-out meals, missed family meals, prepared entrees, and eating while working; and among mothers with restaurant meals, missed breakfast, and prepared entrees. The demand for convenience food in the Great Britain has been fuelled by working longer hours (Geest, 2001; Buckley et al., 2007). This has resulted in time-sensitive shoppers (Umesh et al., 1989; Buckley et al., 2007) as time is now being allocated to work in the marketplace at the expense of home production and leisure (Redman, 1980; Buckley et al., 2007). Hence, H₂:

Family influence has a positive relationship with convenient food consumption

The impact of religion on food consumption depends on the extent to which individuals follow the teachings of their religion (Abdul et al 2009). As a product attribute in Islam, *halal* is based on the nature, origin and the processing method of the food. The presence of credence quality of the *halal* food has to be clearly communicated through labelling to make it trustworthy (Verbeke, 2005; Abdul et al., 2006). Such a prophecy is being translated into business opportunities by leading multinationals that seek to provide Islamic version of mainstream western products and services such as fast food, gyms and luxury hotels (Alserhan 2010). These businesses allow Muslims to practice their religious principles in eating, clothing and travelling (Alserhan, 2010). Eventually,

H₃: Halal awareness has a positive relationship with convenient food consumption

Health awareness is also considered as a factor in consumption of convenient food. As reported in some study, whether people eat healthfully at work may depend on one's particular type of job and/or the institutional or environmental factors near the work site (Blanck et al., 2009). Thus, fast-food outlets, casual dining restaurants, grocery stores and vending machines near the work site are likely to be accessed by workers during work or non-work hours (Blanck et al, 2009).

Many respondents from previous study perceived that healthy eating is not enjoying. There is a need to associate fun and enjoyment with healthy eating (Chan and Tsang, 2011). Present study found that perceived behaviour control and attitudes toward healthy eating were most important factors in predicting adolescents' intention for healthy eating (Chan and Tsang, 2011). Fast-food revolution has adversely affected children and adolescents. The U.S was the first country to experience the health consequences of fast food and now has the highest obesity rates (Seubsman et al, 2009). Eventually,

H₄: Health awareness has a negative relationship with convenient food consumption

People tend to eat fast food because it is inexpensive compared to eating salad or other healthy food (Neumark et al., 2003). Increased income and economic growth has resulted in many cash-rich

individuals. Dual-income households are busy families or couples with somewhat larger disposable income. An implication of this is the increased use of convenient food (De Boer et al., 2004). Consequently,

H₅: Price consideration has a positive relationship with convenient food consumption

Acquiring value for money is important. Convenient food value for money measures the extent to which the food offer value for money to individual (Buckley et al., 2007). Hence, considering the price of food is more important among low-income people compared to those who are better off. Women typically go shopping, so they are more aware of budgetary limitation than men (Steptoe et al., 1995). Hence,

H₆: Budget allocation has a positive relationship with convenient food consumption

3.0 Methodology

A survey was conducted to identify the above factors that may have an impact on convenient food consumption. A convenient sampling was used to draw the respondents, and they were mainly employees of one of the local universities in Malaysia. They work approximately nine hours a day and more importantly, they need to juggle between their house chores and office work. Self-administered survey was employed to collect the data for this study (Aaker et al., 2005).

The employed questionnaire comprises of three sections. The first section collects information pertaining to the types of convenient food consumed by the respondents. Next section gathers information relating to respondents' perception on convenient food. A five-point Likert scale (from 1 – strongly disagree to 5 – strongly agree) was used to assess the respondents' perception on convenient food. Lastly, the third section provides information pertaining to the respondents' profiles including their gender, age, education, income, occupation, number of children and their age. The questionnaires were distributed to 180 respondents. However, only 135 questionnaires were usable for the study.

The first stage of data analysis was based on exploratory factor analysis (EFA) to identify the factor structure. The second stage of the analysis employed confirmatory factor analysis (CFA) to confirm the factor structure. Structural Equation Modelling (SEM) was applied to test the hypothesis. SEM provides a technique of testing hypotheses concerning associations amongst latent and observed variables by approximating a set of separate equations of multiple regressions at the same time (Hair et al., 1998). Explicitly structural equation modelling sketches together the elements of path analysis and factor analysis (Hair et al., 1998).

4.0 Findings and Analysis

All the items were factor-analysed and the result revealed that the Kaiser-Mayer-Olin statistic of sampling adequacy was 0.792. The construct validity can be identified when the value of all items is more than 0.5. Appendix 1 illustrates all the items measuring each construct and it is highly loaded on their particular construct, thus construct validity of the instruments is established. Reliability analysis, using Cronbach's alpha was performed to test the reliability and internal consistency of each of the factors. Cronbach coefficients ranged from 0.59 to 0.75 (> 0.5) is considered acceptable as an indication of reliability (Hair et al., 2010).

4.1 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is a special form of factor analysis. It is employed to test whether the measures of construct are consistent with the researchers' understanding of the nature of the

construct. Here, the researchers perform CFA for each construct to assess the validity and reliability of the measurement model. The researchers have examined the standardized factor loading for each item and the fitness indexes for the model.

4.2 Structural equation modelling

The structural equation model was examined to test the relationship among constructs. Goodness-of-fit indicators for this model were **normed chi square = 1.971**, **CFI = 0.839** and **RMSEA = 0.085**. Figure 1 below depicts the full model.

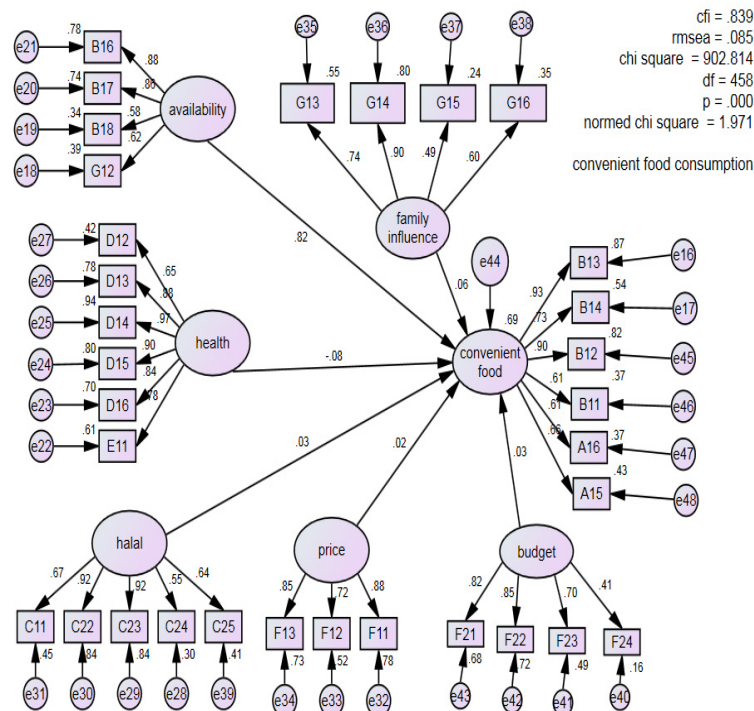


Figure 1: Convenient food consumption (full model)

4.3 Hypotheses testing

Table 1 demonstrates the hypothesized model of relationships among key construct. The full model was tested based on the measurement model previously validated from CFA. The R^2 value of 0.69 indicates that 69 percent of the variance of convenient food product can be explained by time factor, family influence, halal awareness, health awareness, price consideration and budget allocation.

Table 1: Standard Estimation of the Main Model

Hypothesis	Structural path	Std. Regress weight	S.E.	C.R.	P.	Hypothesis testing
H ₁	Time factor of food → convenient food consumption	0.943	0.131	7.224	***	supported
H ₂	Family influence has a positive relationship with convenient food consumption	0.067	0.066	1.007	0.314	Not supported
H ₃	Halal awareness → convenient food consumption	0.67	0.128	0.523	0.601	Not supported
H ₄	Health consciousness → convenient food consumption	-0.124	0.095	-1.297	0.195	Not supported
H ₅	Price consideration → convenient food consumption	0.018	0.061	0.290	0.772	Not supported
H ₆	Budget allocation → convenient food consumption	0.079	0.154	0.509	0.611	Not supported

More importantly, the results in Table 1 also show that time factor is positively related to convenient food consumption with beta values $\beta = 0.82$, $p < 0.01$. However, the results show that all of the other hypotheses are not supported ($p\text{-value} > 0.001$).

5.0 Conclusion

In conclusion, the researchers can deliberately conclude that time factor has significant positive impact on convenient food consumption. The rest of the factors namely health consciousness, halal awareness, price consideration, budget allocation and family influence do not have any significant influence on convenient food consumption.

It is interesting to note that health awareness was not significantly negatively related to convenient food consumption. Hence, it is important for producers to communicate to customers that healthy food is very simple to prepare. Health-conscious consumers want food that is convenient, fresh and healthy. They are also willing to accept some loss in pleasantness. Hence, food marketers should improve their product packaging and quality to reflect healthy convenient food.

As for *halal* awareness, it seems that marketers need to promote more of its *halal* branding. Perhaps, one of the reasons *halal* awareness is not associated to convenient food consumption is due to the fact that customers tend to perceive that all processed food is *halal*. Hence, policy makers especially Jabatan Kemajuan Islam Malaysia (JAKIM) should monitor all food-producers in ensuring that customers are served with *halal* food and *halal* convenient food products.

Appendix 1: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
eat out to save cooking and cleaning	.568					
have lunch together at weekends						
By buying frozen food	.533					
eat quickly prepared meals	.712					
look for convenient food to serve	.711					
buy take away food when busy	.611					
dinner in fast food restaurant on weekdays	.667					
requires less time to cook	.835					
easy to prepare	.884					
it is a waste to spend long time in kitchen	.772					
preparing meals						
work more than 8 hours a day	.614					
can be cooked easily	.843					
available in shops and hypermarket where I/we live or work	.790					
we are busy with our work	.574					
will ensure that the food product is halal			.725			
read the ingredients that used in the product			.535			
will choose the restaurant that display halal logo and certificate			.613			
have halal logo from Islamic Council			.704			
free from swine gelatin or DNA			.752			
be slaughter by the name of Allah for meat product			.691			
be cooked by muslim worker			.636			
be cooked or prepared with high standard of cleanliness			.654			
contain no additives		.557				
contain natural ingredients		.623				
is nutritious		.781				
contain a lot of vitamins and minerals		.831				
is high in protein		.785				
is high in fiber and roughage		.856				
keep us healthy		.756				
help us control our weight		.788				
is low in calories		.761				
help us to cope with stress		.758				
keep us awake/alert		.785				
the product is not too expensive					.798	
the price is cheap					.760	
it gives good value for money					.822	
because we can afford to buy						.820
have enough money to buy the food						.787
because we have larger food budget						.742
when we are sure about the nutrition contain in the food products						.549
Just like to eat meal out				.694		
comfortable to eat in restaurant				.613		
fast food to fulfil children request				.549		
fast food offer lower price				.700		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

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